LISTING OF THE CLAIMS

Claims Pending: Claims 1-60

1. **(Previously Presented)** A mobile device, comprising:

a keypad to receive an input string representative of one or more Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

a language system to receive the input string entered via the keypad and to generate likely Chinese language characters based on the input string;

a language model to derive likely Chinese language characters based on the input string; and

a processor operative with the keypad and a memory to seamlessly support at least the following modes:

presentation of the likely Chinese language characters on a display;

selection of the likely Chinese language characters; and/or

further input of one or more Chinese phonetic characters on the keypad.

2. **(Original)** A mobile device as recited in claim 1, wherein the phonetic characters are Chinese Pinyin and the language characters are Chinese Hanzi.

3. **(Original)** A mobile device as recited in claim 1, wherein the likely language characters are presented on the display in an index that associates selection keys of the keypad with the language characters so that user entry of a selection key results in a selection of a corresponding language character and user entry of a non-selection key results in further input.

4. **(Original)** A mobile device as recited in claim 1, wherein the likely language characters are presented on the display in an index that associates selection keys of the keypad with the language characters, the selection keys being selected based on whether the letters associated therewith follow the phonetic characters already entered.

5. **(Original)** A mobile device as recited in claim 1, wherein the language system includes an association module that automatically presents the language characters as the user depresses individual keys.

6. **(Original)** A mobile device as recited in claim 1, wherein the language system includes a sentence-based search engine to derive the language characters based on context of the input string within one or more words of a common sentence.

7. **(Previously Presented)** A mobile device as recited in claim 1, wherein the language model statistically derive the Chinese language characters.

8. **(Original)** A mobile device as recited in claim 1, wherein the language system includes a character-based bigram language model and a word-based N-gram language model, where N>2.

9. **(Original)** A mobile device as recited in claim 1, wherein the language system converts the phonetic characters to the language characters.

10. **(Original)** A mobile device as recited in claim 1, wherein the language system includes a direct key-based search engine that generates the language characters based on a key sequence entered on the keypad in lieu of converting the phonetic characters to the language characters.

11. **(Previously Presented)** A mobile device as recited in claim 1, wherein the language system includes a surname model to detect surnames in the input string.

12. **(Original)** A mobile device as recited in claim 1, wherein the language system includes a first name model to detect first names in the input string.

13. **(Original)** A mobile device as recited in claim 1, wherein the language system comprises:

a first name model to detect first names in the input string;

a surname model to detect surnames in the input string; and

a character-based bigram language model.

14. **(Original)** A mobile device as recited in claim 1, wherein the language system comprises:

a resident language model residing on the mobile device to statistically derive the language characters using a first statistical language model; and

a nonresident language model residing on a remote server, communicatively coupled to the mobile device, to statistically derive the language characters using a second statistical language model.

15. **(Previously Presented)** A mobile device as recited in claim 1, further comprising a scroll control key to present other likely Chinese language characters.

16. **(Original)** A mobile device as recited in claim 1, embodied as a mobile phone.

17. **(Previously Presented)** A mobile device, comprising:

a keypad to receive an input sequence, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

a direct key-based search engine that generates possible Chinese language characters that are not part of the alphabet based on a the input sequence entered on the keypad;

a language model that derives possible Chinese language characters based on the input sequence; and

a processor operative with the keypad and a memory to seamlessly support at least the following modes:

presentation of the possible Chinese language characters on a display;
selection of the possible Chinese language characters; and/or
further input entered on the keypad.

18. **(Original)** A mobile device as recited in claim 17, wherein the alphabet is an English alphabet and the language characters are Chinese Hanzi.

19. **(Original)** A mobile device as recited in claim 17, further comprising an association module that automatically presents the language characters as the user depresses individual keys.

20. **(Original)** A mobile device as recited in claim 17, embodied as a mobile phone.

21. **(Previously Presented)** A mobile device, comprising:

a keypad to receive a key sequence representative of one or more Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

a search engine to generate possible Chinese language characters based on the key sequence;

an association module that associates the key sequence with possible Chinese language characters that are not part of the alphabet; and

a processor operative with the keypad and a memory to seamlessly support at least the following modes:

presentation of the possible Chinese language characters on a display;
selection of the possible Chinese language characters; and/or
further input of one or more Chinese phonetic characters on the keypad.

22. **(Original)** A mobile device as recited in claim 21, wherein the alphabet is an English alphabet and the language characters are Chinese Hanzi.

23. **(Original)** A mobile device as recited in claim 21, embodied as a mobile phone.

24. **(Previously Presented)** A mobile device, comprising:

a keypad to receive an input string representative of one or more Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

a language system to receive the input string of letters from the alphabet entered via associated number keys of the keypad,

a statistical language model to convert one or more Chinese phonetic characters to Chinese language characters that are not part of the alphabet using at least one neighboring word in a common sentence; and

a processor operative with the keypad and a memory to seamlessly support at least the following modes:

presentation of the Chinese language characters on a display;

selection of the Chinese language characters; and/or

refusal of the Chinese language characters.

25. **(Original)** A mobile device as recited in claim 24, wherein the alphabet is an English alphabet and the language characters are Chinese Hanzi.

26. **(Original)** A mobile device as recited in claim 24, embodied as a mobile phone.

27. **(Previously Presented)** A system comprising:

a keypad to receive an input string representative of Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

a search engine to identify the likely Chinese language characters;

a resident language model residing on a mobile device to convert Chinese phonetic characters input received from the keypad into likely Chinese language characters using a first statistical language model; and

a nonresident language model residing on a server remote from the mobile device, the nonresident language model being configured to convert the Chinese phonetic characters into the likely Chinese language characters using a second statistical language model; and

a processor operative with the keypad and a memory to seamlessly support at least the following modes:

presentation of the likely Chinese language characters on a display;

selection of the likely Chinese language characters; and/or

refusal of the likely Chinese language characters.

28. **(Original)** A system as recited in claim 27, wherein the first statistical language model is a character-based bigram language model and the second statistical language model is a word-based N-gram language model, where N>2.

29. **(Previously Presented)** A method comprising:

receiving an input string entered via a keypad that is representative of one or more Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

presenting likely Chinese language characters based on the input string; ~~and~~

deriving likely Chinese language characters based on the input string;

seamlessly supporting at least the following modes:

displaying the likely Chinese language characters;

selecting the likely Chinese language characters; and/or

further inputting one or more Chinese phonetic characters.

30. **(Original)** A method as recited in claim 29, wherein the language characters are Chinese Hanzi.

31. **(Original)** A method as recited in claim 29, further comprising indexing the likely characters when presented in a manner that associates certain keys of the keypad with the language characters so that user entry of a certain key results in a selection and user entry of a non-certain key results in further input.

32. **(Original)** A method as recited in claim 29, further comprising:

associating key entries with the language characters; and

presenting the likely language characters intended by the user as the user depresses individual keys.

33. **(Original)** A method as recited in claim 29, further comprising deriving the language characters using a context-based statistical language model.

34. **(Original)** A method as recited in claim 29, further comprising detecting surnames in the input string.

35. **(Original)** A method as recited in claim 29, further comprising detecting first names in the input string.

36. **(Original)** A computer-readable medium storing computer-executable instructions that, when executed on a processor, perform the method as recited in claim 29.

37. **(Previously Presented)** One or more computer-readable media having stored thereon a plurality of instructions that, when executed by one or more processors of a computer, causes the one or more processors to perform acts including:

receiving an input string entered via a numeric-based keypad where number keys in the keypad have associated letters in an alphabet, the input string being representative of one or more Chinese phonetic characters;

generating possible Chinese language characters based on the input string;

converting the input string of one or more Chinese phonetic characters to possible Chinese language characters that are not part of the alphabet;

presenting the possible Chinese language characters using an index that associates selection keys of the keypad with the Chinese language characters, the selection keys being chosen based on whether the letters associated with the selection keys are likely to follow the one or more Chinese phonetic characters already entered; and

seamlessly supporting at least the following modes:

displaying the possible Chinese language characters;

selecting the possible Chinese language characters; and/or

further inputting one or more Chinese phonetic characters.

38. **(Original)** One or more computer-readable media as recited in claim 37, wherein the phonetic characters are Chinese Pinyin and the language characters are Chinese Hanzi.

39. **(Previously Presented)** One or more computer-readable media as recited in claim 37, wherein the plurality of instructions further cause the one or more processors to perform acts including selecting one of the selection keys to select one of the language characters.

40. **(Original)** One or more computer-readable media as recited in claim 37, wherein the plurality of instructions further cause the one or more processors to perform acts including selecting a key that is not a selection key to continue the input string.

41. **(Original)** One or more computer-readable media as recited in claim 37, wherein the plurality of instructions further cause the one or more processors to perform acts including:

associating key entries with the language characters; and

presenting the likely language characters intended by the user as the user depresses individual keys.

42. **(Original)** One or more computer-readable media as recited in claim 37, wherein the plurality of instructions further cause the one or more processors to perform acts including deriving the language characters using a context-based statistical language model.

43. **(Original)** One or more computer-readable media as recited in claim 37, wherein the plurality of instructions further cause the one or more processors to perform acts including detecting surnames in the input string.

44. **(Original)** One or more computer-readable media as recited in claim 37, wherein the plurality of instructions further cause the one or more processors to perform acts including detecting first names in the input string.

45. **(Previously Presented)** A method comprising:

receiving an input string entered via discrete keys of a keypad that is representative of one or more Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

generating possible Chinese language characters intended by the user based on a key sequence entered on the keypad in lieu of converting the Chinese phonetic characters to the language characters;

deriving possible Chinese language characters based on the input string; and

seamlessly supporting at least the following modes:

displaying the likely Chinese language characters;

selecting the likely Chinese language characters; and/or

further inputting one or more Chinese phonetic characters.

46. **(Original)** A computer-readable medium storing computer-executable instructions that, when executed on a processor, perform the method as recited in claim 45.

47. **(Previously Presented)** A method comprising:

receiving key entries entered via a numeric-based keypad that is representative of one or more Chinese phonetic characters, where number keys in the keypad have associated letters of an alphabet;

associating strings of key entries with likely Chinese language characters that are different than the letters of the alphabet;

presenting likely Chinese language characters intended by the user as the user depresses individual keys; and

seamlessly supporting at least the following modes:

displaying the likely Chinese language characters;

selecting the likely Chinese language characters; and/or

further inputting one or more Chinese phonetic characters.

48. **(Original)** A computer-readable medium storing computer-executable instructions that, when executed on a processor, perform the method as recited in claim 47.

49. **(Previously Presented)** A method comprising:

receiving an input string of letters entered via a numeric-based keypad where number keys in the keypad have associated letters, the input string of letters being representative of one or more Chinese phonetic characters;

presenting possible Chinese language characters based on the input string;

converting the input string of letters that represent the Chinese phonetic characters to possible Chinese language characters based upon a context of at least one word in a sentence within which the input string is a part; and

seamlessly supporting at least the following modes:

displaying the possible Chinese language characters;

selecting the possible Chinese language characters; and/or

further inputting one or more Chinese phonetic characters.

50. **(Original)** A computer-readable medium storing computer-executable instructions that, when executed on a processor, perform the method as recited in claim 49.

51. **(Previously Presented)** A method comprising:

receiving an input string entered via a keypad on a mobile device that is representative of one or more Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

sending the input string to a remote server;

generating likely Chinese language characters based on the input string at the remote server; and

returning the Chinese likely language characters to the mobile device for display; and

seamlessly supporting at least the following modes:

displaying the likely Chinese language characters;

selecting the likely Chinese language characters; and/or

further inputting one or more Chinese phonetic characters.

52. **(Previously Presented)** A mobile device, comprising:

a keypad to receive an input string representative of one or more Chinese phonetic characters, wherein the keypad comprises number keys, the number keys having associated letters of an alphabet;

a language system to receive the input string of letters from the alphabet entered via associated number keys of the keypad, and to generate likely Chinese language characters based on the input string;

a language model to derive likely Chinese language characters based on the input string; and

a display to present the likely Chinese language characters for user selection.

53. **(Previously Presented)** A mobile device as recited in claim 52, wherein the likely language characters are presented on the display in an index that associates selection keys of the keypad with the language characters so that user entry of a selection key results

in a selection of a corresponding language character and user entry of a non-selection key results in further input.

54. **(Previously Presented)** A mobile device as recited in claim 52, wherein the likely language characters are presented on the display in an index that associates selection keys of the keypad with the language characters, the selection keys being selected based on whether the letters associated therewith follow the phonetic characters already entered.

55. **(Previously Presented)** A mobile device as recited in claim 52, wherein the language system includes an association module that automatically presents the language characters as the user depresses individual keys.

56. **(Previously Presented)** A mobile device as recited in claim 52, wherein the language system includes a sentence-based search engine to derive the language characters based on context of the input string within one or more words of a common sentence.

57. **(Previously Presented)** A mobile device as recited in claim 52, wherein the language system includes a language model to statistically derive the language characters.

58. **(Previously Presented)** A mobile device as recited in claim 52, wherein the language system includes a character-based bigram language model and a word-based N-gram language model, where N>2.

59. **(Previously Presented)** A mobile device as recited in claim 52, wherein the language system includes a direct key-based search engine that generates the language characters based on a key sequence entered on the keypad.

60. **(Previously Presented)** A mobile device as recited in claim 52, embodied as a mobile phone.